1: Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

The character of the spirit is not usually designated, but those specified include a wolf, a hawk, and the spirit of the mythical personage who made the deer. A pregnant woman may hear the cry of a certain small hawk (*dd̨údd*). Later the child pines, or if strong, he may often lie down as though fainting. A shaman called to sing over him, tells the mother, "When you were first pregnant, you heard a hawk calling. The child has a spirit in him; that is the hawk which entered at that time." Sometimes the shaman may succeed in carrying off the hawk spirit; then the child will live. 776 787 756

Despite the fact that the sun, the rocks and trees, etc., are addressed in prayer, spirits are not generally localized. Only one such is spoken of. 776 778

Long ago the mythical people made spirits and put them somewhere, so that one can dream of them, get them, and thus become a shaman. Spirits are not about here in the trees, rocks, etc., but one is in an ever-flowing pool (*ihaIuŋkaiiild̨a*, black water in a round place) located in a little canyon beside the Colorado on the Walapai Reservation. It has a rough wall around it. People do not approach it, but when they look down on it (from above, it wells up, although it is not hot. Strewn about are shell beads, arrowheads, deer bones with incised decorations (but no turquoise), placed there by some prehistoric people. Neither Walapai nor Havasupai offer to it. [782]

Several mythical beings are referred to in myths, such as Pagiyóga and Pagiyóvà. It seems doubtful that these are prayed to nor do they address the two culture heroes in prayer. [773] [782]

Spirits are the cause of illness, although this belief does not preclude that which holds minor ailments due to natural causes, infringements of taboos, or to illy-defined magical practices. A dead shaman may send his spirit into the body of one who corruptly imitates his songs; the creator of deer sent his into the man who wantonly slaughtered the animals; the hawk-spirit enters the body of the unborn child. 753

There are perhaps three types of shaman: those who cure (*gIóiyᵃ'*) weather shamans (possibly called by the same word), and practitioners of a sort (*gIsdnd*)[1] who specialize on fractures, wounds, or snake bites, in following the deer, etc. Apparently all of them dream, but only the first have familiar spirits. These three types are fairly distinct, but not exclusive; for example, Doctor Tommy, who divides his time with his Walapai father's people, and who performs most of the cures (including those of snake and scorpion stings) claims to bring rain and to have medicine to destroy the whites. Only men can be shamans. 756 791 778 [462]

Shamanistic power is acquired by inheritance or by dreaming. In 1918 there were three men recognized, Bob and Doctor Tommy, who both 756 791 776

[1] Compare Yavapai pa-amachs, shaman (Corbusier, 333)

1: Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

áswö'gà	gwewálà	wi'và	mà'ûg	539 778 782
prayerstick	feathers	I put in spring,	look at it	

matö'kmidjpágàhögwïg'ï.
plenty more come.

Taboos and Miscellaneous Magical Beliefs

Proscribed types of action are not numerous in Havasupai life; 784
whether they are less binding on that account remains to be discovered. What happens when taboos conflict, as may well occur, was put to a test. Sinyella, when reminded that the father of an infant may not eat nor even 753 784
touch a mountain lion for fear the baby will sicken, although quivers are made of this skin, replied: "It is all right for any man to carry a mountain lion quiver, but a young man must not touch the beast's flesh. Should he find a deer of which the lion has eaten, he should put sand over the chewed parts. Old men can eat this meat, but not women with infants, for if one does the baby will have stomach trouble." On another occasion, asked why the baby sickened, he said that wolves, mountain lions, and eagles are bad animals; that they contaminate the carcass as with poison. As for the reason that it is the infant, not the parent, who sickens: "Mountain Lion and Wolf said long ago that it would be like that."

Other taboos affect the habits of a couple at birth (pp. 300, 304). 784
The unborn child will be left-handed if the mother uses hers (p. 300). There must be no intercourse before a deer hunt (p. 110). The dead are not named (p. 304) and the crops from a dead man's land are not ordinarily used (p. 233). A boy should not smoke until he kills a coyote and he does not eat his first deer (p. 324).

Magical practices mentioned in other connections may also be re- 789
sumed here. There are special observances at a woman's periods (p. 326); they drink an abalone shell concoction to conceive (p. 301). A string figure is made to forecast the sex of an unborn child (p. 300). The child's first hair is preserved so that later hair will grow, and the umbilical cord is smeared on the child (p. 304). The fate of one twin affects the other (p. 301). Arrowheads are worn to prevent misfortune and ear lobes pierced to prevent deafness (p. 194). Burning with a slow match prevents rheumatism and throwing it back improves the memory (p. 323). The property of the dead is destroyed (p. 292). There is a definite procedure before a deer hunt (p. 109). Mush is the first thing cooked in a pot to make it inexhaustible (p. 140). Race colts are sung over (p. 337). The musical bow is used to make an opponent lose (p.

INDIVIDUAL DEVELOPMENT

Birth Customs

162 582 836 848 Havasupai families averaging 4.7 persons, include roughly as many children as our own. Girls marry soon after reaching maturity and conception soon follows. Intercourse is not uncommon prior to this time, but illegitimate births are said to be extremely rare. Yet in at least one instance such a birth did not hinder subsequent marriage.

842 [787] No preference is expressed for either sex, nor do they claim to control the sex of the unborn child. However, by way of forecast, someone visiting the prospective mother will make string-figures which may resemble either a boy or girl.

843 746 For a month before the birth the woman and her husband must refrain from meat, and the woman alone from very salty foods. These taboos are relaxed a month after delivery, when hemorrhages cease. Should she ignore them there will be complications. During this time she must use a stick to scratch herself.

843 827 753 The child will be left-handed if the woman uses that hand much. Should she hear a hawk (*ddjúdd*) cry, her child will have the hawk's spirit, which will cause it to sicken.

844 When a woman thinks delivery near, she calls her relatives. In one case observed, a young girl bearing her first child was closely watched, accompanying her mother everywhere. The mother assists the delivery, squatting behind the seated woman, clasping her hands above the abdomen and pressing downward. As this manipulation nears success, a husband, father, or brother is called on to assist with pressure applied to the front and sides. A hole has been dug in front of the woman to receive the child, in which a blanket has been folded in nest-like form. The umbilical cord is immediately squeezed and tied tightly an inch from the body, and then cut. Pressure is applied to the abdomen to cause the ejection of the placenta. This is buried deeply so that animals cannot eat it, for should they do so, the woman would become barren. The woman then stands erect to have a broad woven Hopi belt bound tightly around her abdomen in order to force out the fluids. Should this be neglected, they will flow into the top of the womb, causing death. Her mother washes the woman's hair and body with soapweed lather. Her husband has prepared a hole filled with hot stones outside of the house, or within it if it is winter. A bed of damp sand covered with old clothes is prepared on this; the woman lies face down, and is completely covered with blankets. The purpose of this is to continue the flow by heating

1:Spier E-5 (1918) 1928
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Havasupai

854 The baby's first
[852] thin hair is sometimes clipped off and tied in cloth in little bundles which
[827] are swung from the hoop. This is so that the hair will grow thick; if these were thrown away the hair would not grow. When the end of the
[846] umbilical cord drops off, it is similarly wrapped and hung on the hoop.
[732] If it is lost or thrown away the child will grow up idiotic. When at last
856 the child can walk, the dry cord is ground to a powder which is smeared longitudinally around his body from head to crotch and up the back to the head. This is done so that the cord will not be lost, i.e., it is returned to his body so that he will always have it. Mothers object somewhat to
[531] selling these articles with the cradle. The ornamentation of the cradle does not differ for boy or girl.

262 The parents of infants must exercise a number of precautions. The
853 new mother must eat only corn soup in order to have a free flow of milk. Corn or bean mush is far too mealy. Similarly salt will dry up the flow; for salt on the ground makes it hard. And if her husband eats meat the woman will be harmed just as though she had partaken. Although
262 mountain lion flesh is sometimes eaten, it cannot be eaten or even touched
[753] by those who have babes in arms, for the latter will pine, their eyes sink in, their bellies ache, and diarrhoea ensues. This also applies to the flesh of a deer slain by a mountain lion. The parents of crawling children do
[856] not kill snakes for fear that the child will resemble the snake, i.e., not be
[753] strong enough to walk at the proper time. Infants are not permitted to eat salt; it would cause white sores on the tongue.

854 No special prayers are offered for the growth of a child, nor is any reason assigned for the growing process, it is so "just because the child suckles and eats." A fretful nursing infant is given an adult's finger to
862 suck. Weaning is begun when the child can walk a few steps unsupported; when it runs alone, the process is ended. During this period the child is given a little of everything others eat (and it includes a vast array of indigestible foods!) for there are no special foods for weaning.

Names

551 Havasupai names are freely used in address or reference: they have no special emotional or religious significance. They are even told to strangers without much hesitation. This seems to be a corollary both of their insignificant character, for they are mostly nicknames or meaningless words, and of their being labels casually given by others rather than names assumed. Undoubtedly this common use of names accounts in
[601] part for the imperfect usage of relationship terms, to which I have referred. They do not like to name the dead, relatives or others, but their

524 177 hood for both boys and girls. These have been superseded by commercially manufactured toys.

853 The breast (or a bottle) is almost invariably offered when a young baby cries. When the infant is four or five months old, he is fed fresh peaches, mashed by the mother's fingers on the metate, or soup from stewed, dried peaches. He also receives some premasticated morsels of corn or other items from the family meals, transferred by the mother's fingers from her mouth. At about one year the baby eats thin cornmeal mush, and the softer foods are no longer specially prepared for him, but meat and other coarse foods are ground on the metate, or premasticated until the baby has enough [482] teeth to chew adequately. An informant stated, "The mother does most of the feeding, but if she is busy, the father will do it. A man likes to do things for his baby."

Sitting and Crawling

854 868 At three or four months of age an infant is removed from the cradle and encouraged to sit alone. He is also permitted freedom to crawl on the ground. No babies were observed scampering rapidly over the ground in the way an experienced crawler will do on a smooth floor. An infant crawling out-of-doors appears to move cautiously, stopping frequently to sit up and handle clods, rocks, and sticks, or to investigate any obstacle he encounters. Parents usually let a baby explore unhindered. However, when an object is taken from a baby, it is not grabbed hastily nor is the baby handled roughly when he is removed from a place where the adults think he should not be. Parental behavior tends to be calm and gentle. If a protest is forthcoming from an infant whose play has been interrupted, it is seldom more than a puckered face or a brief wail. The mother may distract the baby with a toy, or she may simply turn her attention elsewhere after quietly telling the baby to be still. The baby may attempt to recapture his mother's attention, but he quickly loses interest and resumes his playing.

231 Dogs, which are attached to every household, may approach a cradled child to sniff or lick his hands or face. An infant seldom shows fear of a dog, but if he does, the dog is quickly and loudly driven away. This constitutes the most frequent occurrence of harshness in connection with the baby, for a dog is often addressed sharply and may be kicked or beaten if it doesn't respond immediately. Nevertheless, dogs are nearly always within the baby's range of vision, and by the time he reaches the crawling stage, a baby begins to play with any dog that stays within reach of his hand. The dog's ears and tail may be pulled or twisted, or its eyes poked by small fingers; later, as the child grows more active, a dog is sat upon, tumbled about, and pinched; and still later on, it is lassoed, tied, and dragged about.

757 [753] [262] It is believed that blisters on the tongue or inside the mouth of a nursing infant are a result of the mother's breaking the salt taboo. The blisters are treated

though she may explain to the elements, "Go over there on top (on the plateau) where those people need water. We don't need it down here. We have plenty." An informant told me that a heavy storm which swelled the river on the night of August 3, 1951, was halted in this manner by a neighbor who became alarmed at the proportions the flood was reaching and who happened to be pregnant at the time. 843 789

By gesturing with only one hand, a pregnant woman can command rain to fall. (A person of either sex can bring rain during a dry period by singing a special song which everyone supposedly knows but which is considered dangerous because it may cause a great storm.)

In gambling, a pregnant woman brings luck to herself and her husband or to any other player she may stand behind. Informants added cautiously, "But if she doesn't win the first or second hand then she should quit. It shows that she won't win at that time." [777] [525]

Taboos during Pregnancy

Spier (1928, 300) states that, "For a month before birth the woman and her husband must refrain from meat, and the woman alone from very salty foods. These taboos are relaxed a month after delivery, when hemorrhages cease. Should she ignore them there will be complications. During this time she must use a stick to scratch herself." 843

Informants now variously report that taboos apply during almost an entire pregnancy or as little as a month before birth and from eight or 10 days until several months afterward. They are generally agreed that women formerly observed taboos strictly while now only a few women are very careful and some scarcely heed restrictions. Informants were not agreed as to specific details of certain taboos, sometimes expressing opposite beliefs. For example, one woman reported that a pregnant woman "can't scratch her face or belly or it will make a scar. She can't use a stick either; that would also make a scar. A stick may be used during monthlies, but not during pregnancy." Most other women stated that a scratching stick was as properly used during pregnancy as during menstruation.

Meat taboos particularly emphasized tongue, kidney, intestines, lungs, liver, tenderloin, sausages or weiners. Tongue would cause the baby to chew its own tongue; kidney or tenderloin would cause the child to be deformed, birth would be difficult, or the mother would die at birth; intestines or weiners would tangle the umbilical cord about the baby and prevent its birth; rabbit or cow's head would cause the baby's lip "to be torn the way the cow and the rabbit look" (harelip); mountain lion would cause the baby's death by choking; deer or coyote killed by a mountain lion would cause the infant to have diarrhea. Coyote meat was not eaten at any time, and proximity of a coyote carcass or pelt was dangerous to small children as a cause of diarrhea, other illnesses, or death. 843 262 825 [753]

643 623 657 the borders of his country for all time, and that it remained with him to decide how large it should be, he replied to the following effect: "My people live by their country and their river. They are small. Let your lines but include the river and the little plain we live on; for why should a small nation wish for a great country? There are many other nations in the world. Some one of them — the Americans, perhaps, for they are a great people, and talk of making boundaries where we have lived very well for all time without them — might try, some time, if it were large and indivisible, to take our country from us. Where would the Ha-va-su-paí go? To San Carlos, or to destruction?" And he would not permit the boundaries to be placed a step above the springs which feed his river, or a foot below where it leaps down into the pool under the limestone barrier.

756 Aside from the head chief, perhaps the only representatives of an ecclesiastical order are the well-paid medicine men, some of whom, by virtue of their practices, are a sort of chiefs, and keepers of old traditions and songs, if my informant told the truth. They are believed to possess certain influences over [753] the spirits, and exorcisms which cause disease, as well as over the benevolent spiritistic agencies which assist in its amelioration or cure. Incantation and 755 jugglery are practiced by them, and as 756 the disease or influence is supposed to have an objective spiritual existence, the whole company around a sick person, over whom the doctor is practicing his insane manipulations, rise up at certain intervals of the song, and pound hard bodies, yell, shoot arrows into the air, and fire off guns, in order to assist the medicine man in its extraction, or in frightening it away. No penalty for failure to cure seems to exist, save personal abuse, unless the doctor be accused 683 of sorcery, in which case he suffers, as 754 is the case with other Indians, the uni-

baby bottle"[volcanic bombs?]. The shaman gathered these and tied them in cloth. Then the people advised him to take one more, a smooth opaque white one that could be rubbed on patients' chests to eliminate sickness. The shaman returned with his rocks to Rain Tank and told "sickness that he didn't want it to be going around". The ground around turned white as though it were snow covered. The shaman awakened but later reported that he had felt the dream had not been complete. 756 787

The first spirit he had seen mounted on the white horse continued to come in dreams, teaching him new songs until he knew about twenty, each for a different illness. Errors in singing them would harm the patient. However, if the shaman realized his error he could correct it by beginning the song again. These songs followed a definite sequence, outlining the case history of the patient. The number of songs also increased in direct proportion to the severity of the illness. For one patient, our informant sang six songs and repeated them seven times on each of four nights. Patients were sung over for four nights if the illness was severe or if the spirit of a deceased shaman was suspected of attempting to exert counter-influence to the cure. In the example under consideration, the spirit of Rock Jones, a relative, was under such suspicion. 756 787 533 755

The first night the shaman was not able to diagnose the illness. Even though he sang all night he made no attempt to contact his spirit until the second evening. If a shaman wished to communicate with his spirit he did so only at the end of the night's singing. He put his own spirit, plus that of a female, in the patient. The female spirit, one of the sky people[see p. 2], never dies and is thought to remain inside the patient so long as the shaman desires. In this instance the female spirit was invoked because the patient was a woman. If a woman wished to die the female spirit stayed with her a long time. Under other circumstances the shaman would invoke only his own spirit, which would remain inside the patient only until the conclusion of the treatment. Sometimes it would be inserted from the shaman's mouth, at other times from the head or arm. Our informant used both techniques, placing his hand on top of the patient's head and telling the spirit to enter, as well as blowing and sucking on the patient's throat. Additional sucking could be accomplished on the afflicted part of the body. 756 756 787

Various illnesses assumed specific form and color as they became apparent to the practitioner. These would first take on false, undiagnostic shapes in an attempt to trick the shaman, and were thought not to reveal their true form until the last song. For example, pneumonia was round, smokegray, and mixed with blood. Flu was round but blue and silver. It is worth recording, as an acculturational note, that less serious illnesses were reported to appear to the shaman in the form and color of playing 753 755 822

1753
755 cards: visions of Queens and Jacks would appear to flash on and off the
822 patient's chest.

756 Occasionally a shaman wore eagle down feathers in his hair while
755 curing. These were tied at the back of the head and hung loosely. Shamans
301 also put feathers and white paint on the patient. The paint, white clay ob-
302 tained near the village, was applied in dots or lines in varying designs ac-
cording to the illness. No special garments or other ceremonial appurte-
nances were worn by either shaman or patient.

755 Shamans usually practiced alone, but four lay singers would some-
756 times assist. They did not know the words of the shamans' songs, but
[533] hummed the tune or rhythm. These assistants would participate only dur-
ing the first song, which was repeated four times. If a patient was consid-
ered very ill, however, the relatives might request an additional shaman to
sing. Once when our shaman informant was ill, he asked three other shamans,
including a Walapai, to sing for him. Parenthetically, he was not cured and,
according to him, his own spirit told him to consult an Anglo physician.
Shamans usually did not have the power to cure themselves or close relatives.

756 Our lay informants denied that females became shamans, although
[114] they reported one formerly among the Walapai. This is in agreement with
Spier (1928, 277) and Kroeber (1935, 185). Havasupais frequently had the
Walapai shamaness sing for them when they were visiting that area. How-
ever, our shaman informant knew of one elderly Havasupai woman who sang
over sick people. She did not effect cures by herself, but sang with male
shamans at their request.

Within the lifetimes of our informants no shamans had been killed for
failing to effect a cure. An aboriginal pattern for this seems clear, how-
ever. One shaman who lost a patient, and who was suspected of having used
a malevolent spirit, was hung by his neck from a mesquite tree while brush
piled under him was ignited.

242 It was thought that pictographs painted on cliff walls were done by
756 shamans with the intent to harm someone. Those in a rockshelter in Cat-
754 aract Canyon a few miles upstream from the village were considered es-
[172] pecially dangerous. [These are illustrated by Iliff (1954) and James (1911,
265). The site was a former Havasupai occupation shelter and has been
recorded in the archeological survey of the Museum of Northern Arizona as
NA 7306.] My lay informant who took me to it denied any knowledge of the
paintings. Our shaman informant believed that one individual who lost his
vision did so because he frequently passed by this point. [It should be
noted, however, that these pictographs are along the formerly heavily trav-
eled Topocoba trail to the plateau.]

It was considered improper for shamans to request payment for their services although relatives of the patient usually proferred gifts within a month of the treatment. Tanned buckskin, Navajo blankets, or food were typical gifts. It would appear from our data that the shaman considered this an act of good will rather than specific payment for his "professional services." 756

Weather shamans had less power; usually they did not acquire a spirit. Spier (1928, 281) noted that they "obtained power by dreaming of clouds, thunder, lightning, and of great rain and hailstorms." Rock Jones dreamed of clouds that talked to him. He could see the clouds but could not feel them. He could call them to come near, but only if he was alone. Later, when he became a curer, the same clouds helped him to cure spider and snake bites. Weather shamans did not dance for rain. They sang alone, sometimes before an audience. 756 789 [787]

Before Rock Jones died he didn't leave his cloud power to anyone. The Havasupai have not had a weather shaman since, although our shaman informant believed the power could still come to one of Jones' descendants. Another informant, however, referred to Rock Jones as a malevolent person who had witched and killed many people. Upon his death, his power was consigned to the Yavapai, enemy people, so that it could never return to harm anyone.

Game shamans also were known to the Havasupai. Before extended hunting forays, the shaman would sing special songs calculated to quiet deer and prevent them from running when hunters approached. These were sung at night and repeated four times. Content involved not only information about the habits of the animal, but also that the hunters were sorry for killing the game they needed to assuage their hunger. Locations the hunters intended to visit were also mentioned. Successful hunters frequently prayed to the sun to shine brightly so the deer could be seen. The sun was thought to "own" the animals. 756 224

Game shamans could lure only certain species. Čik pániga, one of three remembered by our informants, was thought to have power over deer and mountain sheep, but not antelope. (Interestingly, while antelope abounded in the upland regions of Havasupai territory, they were hunted only in time of dwindling food supplies. There existed a belief that if antelope hair got on the meat it would bring stomach cramps to the eater.) None of these men were curers. They gained their power through dreaming of specific animals and were not instructed by other shamans. Following a successful hunt, the game shaman usually was given a hind quarter or a section of the ribs, but this was not mandatory. [262] [825] [753] [787]

756 Some informants believed that diarrhea was brought on through eating
755 spoiled meat. Game shamans, therefore, frequently were thought to be
533 effective in curing that malady. The so-called "diarrhea songs" referred
●[753] to unspoiled, fat meat and the desire people had for it. No rattle accompaniment was used with these songs, which were usually repeated at least twice, though not always from the beginning. The songs were sung over both adults and children. During these songs the shaman (or, in the case of a baby, its father) would gently massage the patient's abdomen in an attempt to locate flatulent areas. The singer also would take ashes from the fire, rub them between his palms, and blow them to the east, exhaling audibly as he did so. This action was thought to remove any accompanying pain. (Diarrhea songs are no longer remembered.)

786 Another specialized shaman was one who could cure the bites of snakes,
533 scorpions and black widow spiders. Particular songs, no longer recalled,
[750] were sung to ease pain and to lull the patient to sleep. The shaman also cut the wound with an obsidian or flint blade and sucked the afflicted area. On such occasions, the shaman did not invoke his spirits. The songs, repeated four times, were considered sufficient.

756 Of some interest are the non-power-giving dreams of shamans. Our
787 shaman informant recalled several that appeared to him to be distinct from
[177] the dreams of lay people. They revealed data concerning the soul, life after death, and cosmology [but are tinged with acculturational elements]. Specifically, he denied an Anglo belief in heaven and hell because, in his dreams, he frequently saw the dead nearby rather than in the sky or elsewhere. He dreamed about deceased persons, both those whom he knew, such as his mother's mother, and those only about whom he had heard. Once he dreamed of a "white man" who lived beside the sun in the east. This man told people how to prosper, to obtain good clothing and land. In the west was a "dark man" who gave bad advice. These two quarreled frequently about what each told the Havasupai. After one such argument the "dark man" tried to put all the people in a dark place enclosed by a high wall but the "white man" shone light upon it. (See p. 3.)

The shaman also dreamed often of traveling through the sky. On these occasions he saw no sky people--only uninhabited deep canyons.

Once he dreamed of going under the ground. The earth was coal-black as were some people he saw there. He was afraid and wanted to faint, but with a long stick he removed a lid covering the shaft through which he had entered and he hurried away.

On another occasion he dreamed of a wind that carried him to the south "where the air was good to breathe." On a mountain he saw a man who was a good talker. He also was "white" and "looks like a Supai, talks Supai." This man asked the shaman why he always traveled around through the sky. The shaman didn't answer but awakened. 756 787

Concepts of Disease and Illness 753 ●

Virtually all sickness was believed to have been brought about by malevolent dreams, sorcery, or other supernatural causes.

Psychologically upsetting dreams, especially those involving the possibility of death or loss of the soul, were considered especially harmful. If the individual revealed the general nature of his dream, his family would consult a shaman, who would then sing in an interrogatory fashion to ascertain specific details. The practitioner could exorcise the evil either by sucking intrusive objects from the patient or, through songs, ensure the return of the soul. If a person repeatedly dreamed of a deceased relative, it was believed that the dead person wanted to take the living away. This was particularly true in the case of an individual who died while learning shamanistic powers. 787 755

Shamans were often thought to be sorcerers who could produce illness either in others or in their own immediate families. Anyone who believed a shaman was harboring a particular grudge against him might come under such a spell. A deceased shaman could cause inanimate objects such as rocks, water, ground, air and the sun to make people ill. Bone fractures also were thought to have been caused by evil shamans, either living or dead. Other shamans could effect cures in the same way they counteracted dreams. Fractures were usually set by the shaman before he began to sing. 75 [775]

The vision of a ghost could cause serious illness or death, although this was not invariable. It tended to afflict older persons more than children. Further, not all ghosts were considered malevolent. Again, shamans, by ascertaining the identity of the ghost, could rid the individual of the malady. 75 775 [761]

Shamans themselves could become ill if they made errors in their cures of others or in other ways disobeyed instructions from their spirits. One case brought to our attention involved a shaman who, in an effort to suck a foreign object from a patient, made a mistake. It was reported that he became sick almost immediately and bled from the mouth. [The informant was unaware of the ill shaman's medical history of tuberculosis.] Another 753 756 [164]

shaman was called upon to effect a cure.

000 shaman was called upon to effect a cure.

753 Frequent cases of diarrhea in children were thought to result from
755 the parents' eating spoiled meat or meat from an animal that had been killed by a predator. Shamans had to be told the particulars before attempting to cure.

Preventive Medicine

751 The Havasupai had few concepts of preventive medicine. Strips of porcupine skin with the quills attached occasionally were worn on a hat or on the back of the shirt over the shoulder to ward off illness. A sharp piece of obsidian worn as a pendant was thought to be similarly effective. No decoctions were drunk, no physical exercise was indulged in, and no precautionary ceremonies were employed as preventive medicine. No [302] care was taken to hide hair or nail parings nor was any significance at- [825] tached to them. Babies' hair, however, was not discarded on the ground; [761] should a bird make a nest from it the infant might die.

Medicinal Therapy and Contraceptives

757 Only a few plants and minerals were thought to have therapeutic value, and these were used primarily for minor dermatic inflammations. [See also Spier, 1928, 285.] Sap from stems of the willow was applied to pimples. Grass ashes were sprinkled on any type of open sore. A pinch of salt, either dry or dissolved in water, was blown on sore eyes. Needles of the Douglas fir were boiled and the liquid drunk to stem excessive bleeding from an injury or during menstruation. Tea made from the leaves of Ephedra or juniper was taken for diarrhea.

276 [We were unable to obtain any data concerning the importation and use of peyote. All informants denied it. Iliff (1954, 104-5) discussing the period just prior to 1900, also indicated that the Havasupai "apparently had no knowledge of peyote." Her illustration entitled "Under the tent the peyote cult will hold its all-night service, followed by a feast," seems [171] not to have been photographed in the Havasupai country. Although the Walapai might have experimented once with peyote (Iliff, 1954, 54-58), the movement did not last and is not present among them today.] Jimson weed was not used in any way according to most of our informants [and this is in agreement with James (1903, 256), although Spier (1928, 269) reported [757] its sporadic use by lay persons if not by shamans]. One individual, however, remarked that the juice from the leaf of jimson weed was rubbed on red ant bites.